

(FILE 'HOME' ENTERED AT 11:48:25 ON 17 DEC 2002)

FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 11:48:34 ON 17 DEC 2002

L1 3494245 S NUCLEIC OR PROBE OR OLIGO? OR DNA OR RNA OR MRNA
L2 351466 S IMMOBILIZ? OR ARRAY OR MICROARRAY OR BIOCHIP
L3 104124 S CARBOXYL
L4 303 S L1 (P) L2 (P) L3
L5 159 DUP REM L4 (144 DUPLICATES REMOVED)
L6 13 S L5 AND (WATER OR AQUEOUS)

=>

L Number	Hits	Search Text	DB	Time stamp
1	166	whisenant-e\$.xa.xp.	USPAT	2002/12/17 10:34
2	321	whisenant-e\$.xa. or whisenant-e\$.xp.	USPAT	2002/12/17 10:35
4	101	(whisenant-e\$.xa. or whisenant-e\$.xp.) and (array or biochip or microarray)	USPAT	2002/12/17 10:35
5	0	(whisenant-e\$.xa. or whisenant-e\$.xp.) and (hydrophobic)	USPAT	2002/12/17 10:35
6	56	(whisenant-e\$.xa. or whisenant-e\$.xp.) and (hydrophobic)	USPAT	2002/12/17 10:42
7	0	wo9841531	DERWENT	2002/12/17 10:42
8	1	"9841531"	DERWENT	2002/12/17 10:42
9	1	1999-023988.NRAN.	DERWENT	2002/12/17 10:44
10	310393	array or microarry or biochip	USPAT; US-PGPUB	2002/12/17 10:45
11	567041	negative or hydrophobic or hydrophilic	USPAT; US-PGPUB	2002/12/17 10:45
13	9	((array or microarry or biochip) same carboxyl) same maleimide	USPAT; US-PGPUB	2002/12/17 10:46
12	149	(array or microarry or biochip) same carboxyl	USPAT; US-PGPUB	2002/12/17 11:39
14	68271	cysteine or "sodium dodecyl sulfate" or EPPS or "alkaline solution" or "hydrogen sulfate"	USPAT; US-PGPUB	2002/12/17 11:40
16	1	(cysteine or "sodium dodecyl sulfate" or EPPS or "alkaline solution" or "hydrogen sulfate") same (array or microarry or biochip) same negative	USPAT; US-PGPUB	2002/12/17 11:40
15	205	(cysteine or "sodium dodecyl sulfate" or EPPS or "alkaline solution" or "hydrogen sulfate") same (array or microarry or biochip)	USPAT; US-PGPUB	2002/12/17 11:42
17	33	(cysteine or "sodium dodecyl sulfate" or EPPS or "alkaline solution" or "hydrogen sulfate") near8 (array or microarry or biochip)	USPAT; US-PGPUB	2002/12/17 11:42

L6 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:260506 CAPLUS

DOCUMENT NUMBER: 132:289570

TITLE: Substrate to be used for immobilization of DNA for the preparation of DNA chips

INVENTOR(S): Tanga, Michifumi; Takahashi, Kojiro

PATENT ASSIGNEE(S): Toyo Kohan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000022108	A1	20000420	WO 1999-JP5712	19991015
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9961238	A1	20000501	AU 1999-61238	19991015
EP 1122309	A1	20010808	EP 1999-947929	19991015
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: JP 1998-293480 A 19981015

WO 1999-JP5712 W 19991015

AB Provided are substrates for immobilizing DNAs to present DNA libraries, which substrates are usable in replicating DNAs by DNA amplification reactions on chips. The substrates are selected from diamond contg. non-diamond carbon, amorphous carbon, plastic carbon, and graphite. Further, the surface or the substrates is modified by bonding with terminal hydroxyl groups or carboxyl groups. The carboxyl groups are bonded to the surface via ester or peptidyl linkage. The substrates improve the accuracy of temp. control and thus reduce the DNA contamination. In case of contamination, the surface of the substrates can be treated by hydrolysis reactions for recycling. Prepn. of a diamond disk contg. non-diamond C in gaseous phase by the microwave plasma CVD method, treatment of the disk with the microwave-excited oxygen plasma, and substitution with water vapor to obtain hydroxyl groups on the surface were described.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT